

WHAT IS CLAIMED IS:

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1. A system for driving a nematic liquid crystal in a liquid crystal display device in which the nematic liquid crystal is confined between a common electrode and a segment electrode that are placed between two polarizing plates, comprising:

first means for applying a sequence of selection pulses to said common electrode;

second means responsive to said selection pulses to apply to said segment electrode a voltage having a value corresponding to image data to be displayed; and

third means for changing the value of the voltage applied to said segment electrode during intervals where said selection pulses are not applied so that the value thereof is different from the value corresponding to the image data,

said nematic liquid crystal having electro-optical characteristics that cause transmittance of said display device to change substantially linearly in response to an applied voltage level.

2. The system for driving a nematic liquid crystal according to Claim 1, wherein second means and said third means are switched in response to intervals of said selection pulses.

3. The system for driving a nematic liquid crystal according to Claim 1, wherein said voltages applied to said common electrode and said segment electrode are determined to invert a voltage applied to said liquid crystal soon after each said selection pulse is applied to said common electrode.

4. The system for driving a nematic liquid crystal according to Claim 2, wherein said voltages applied to said common electrode and said segment electrode are determined to

invert a voltage applied to said liquid crystal soon after each said selection pulse is applied to said common electrode.

5. The system for driving a nematic liquid crystal according to Claim 1, further comprising means for heating said nematic liquid crystal to a predetermined temperature.

6. The system for driving a nematic liquid crystal according to Claim 4, further comprising means for heating said nematic liquid crystal to a predetermined temperature.

7. A method for driving a nematic liquid crystal in a liquid crystal display device in which the nematic liquid crystal is confined between a common electrode and a segment electrode that are placed between two polarizing plates, comprising the steps of:

applying a sequence of selection pulses to said common electrode;

in response to said selection pulses, applying to said segment electrode a first voltage corresponding to image data to be displayed; and

applying a second voltage of a constant value independent from the image data to said segment electrode in intervals where said selection pulses are not applied.

8. The method for driving a nematic liquid crystal according to Claim 7, wherein said first voltage and said second voltage are switched in response to intervals of said selection pulses.

9. The method for driving a nematic liquid crystal according to Claim 7, wherein a voltage difference between said common electrode and said segment electrode is determined

to invert a voltage applied to said liquid crystal soon after each said selection pulse is applied to said common electrode.

10. The method for driving a nematic liquid crystal according to Claim 8, wherein a voltage difference between said common electrode and said segment electrode is determined to invert a voltage applied to said liquid crystal soon after each said selection pulse is applied to said common electrode.

11. The method for driving a nematic liquid crystal according to Claim 8, further comprising means for heating said nematic liquid crystal to a predetermined temperature.

12. The method for driving a nematic liquid crystal according to Claim 10, further comprising means for heating said nematic liquid crystal to a predetermined temperature.

13. A system for driving a nematic liquid crystal in a liquid crystal display device in which the nematic liquid crystal is confined between a common electrode and a segment electrode that are placed between two polarizing plates, comprising:

means for applying a sequence of selection pulses to said common electrode;

means responsive to said selection pulses to apply to said segment electrode a voltage corresponding to image data to be displayed; and

means for applying a voltage for displaying black to said segment electrode independently from the image data in response to intervals of said selection pulses.

14. The system for driving a nematic liquid crystal according to Claim 13, further comprising means for heating said nematic liquid crystal to a predetermined temperature.

15. The system for driving a nematic liquid crystal of Claim 13, wherein said nematic liquid crystal comprises a simple matrix nematic liquid crystal in a liquid crystal display device.

16. The system for driving a nematic liquid crystal of Claim 13, wherein said nematic liquid crystal has the electro-optical characteristics that cause transmittance of said display device to change substantially linearly in response to an applied voltage level.

17. A system for driving a nematic liquid crystal in a liquid crystal display device in which the nematic liquid crystal is confined between a common electrode and a segment electrode that are placed between two polarizing plates, comprising:

means for applying to said liquid crystal a voltage of a value corresponding to image data to be displayed;

means for applying a constant voltage to said liquid crystal;

means for switching application of said constant voltage and application of said voltage corresponding to image data to be displayed in a predetermined cycle; ratio of length of time for which said constant voltage is applied relative to length of time for which said voltage corresponding to image data to be displayed being constant;

one of said constant voltage and said voltage corresponding to image data to be displayed being applied to said liquid crystal after said voltages are switched; and

said nematic liquid crystal having electro-optical characteristics that cause transmittance of said display device to change substantially linearly in response to an applied voltage level.

18. The system for driving a nematic liquid crystal according to Claim 17, wherein said liquid crystal has said characteristics at least in a substantial operation range thereof.

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